

# Curriculum Handbook



Newfane High School  
2024-2025



<b>NEWFANE HIGH SCHOOL: INTRODUCTION</b>	<b>6</b>
<b>NEW YORK STATE REGENTS DIPLOMA</b>	<b>7</b>
<b>NEW YORK STATE REGENTS DIPLOMA WITH ADVANCED DESIGNATION</b>	<b>7</b>
<b>NEW YORK STATE LOCAL DIPLOMA</b>	<b>8</b>
<b>MARKING PROCEDURES</b>	<b>8</b>
<b>RANKING OF STUDENTS</b>	<b>9</b>
<b>HONORS AND MERIT DIPLOMA DESIGNATIONS</b>	<b>9</b>
<b>COURSE OFFERINGS BY DEPARTMENT</b>	<b>10</b>
<b>GUIDANCE AND COUNSELING SERVICES</b>	<b>13</b>
Who is your school counselor?	13
When to see the Counselor?	13
Counseling	13
Confidentiality	13
Education Counseling	13
Student Appraisal	14
High School Guidance Office Web Page	14
<b>GLOSSARY OF TERMS COMMONLY USED IN HIGH SCHOOL</b>	<b>15</b>
What is a Regents Exam?	15
World Language (“Foreign Language”) Credits	15
<b>IMPORTANT COLLEGE ENTRANCE EXAMS AND EXAM PREPARATION</b>	<b>16</b>
PSAT EXAM	16
SAT EXAM	16
ACT EXAM	16
SAT AND ACT PREP	16
<b>SCHEDULING</b>	<b>17</b>
Choosing High School Subjects	17
Course Changes	18
Procedure For Processing A Request To Drop A Course	18
AP and College Course Attendance Prerequisite	19
BOCES Vocational Center Enrollment Procedures	19
Tech Prep College Credits	20
College Requirements for Various Fields of Study	20
Engineering	20
Medicine, Dentistry, Pharmaceuticals, Veterinary Medicine	20
Art and Music	20
Health Careers	21
Law/Public Service	21

Teaching	21
Professional Business Careers	21
High Tech Careers	21
Humanities and Social Sciences	21
<b>CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES (CDOS)</b>	<b>22</b>
<b>CAREER AND TECHNICAL EDUCATIONS (CTE)</b>	<b>22</b>
<b>NEWFANE SENIOR HIGH SCHOOL PROGRAM PLANNING</b>	<b>23</b>
Four Year Planning Sheet Example	23
<b>Course Description Section</b>	<b>25</b>
<b>Art</b>	<b>26</b>
Studio in Art	27
Drawing I & II	27
Painting I & II	27
Sculpture I & II	28
Digital Art I & II	28
<b>Business</b>	<b>29</b>
Accounting	30
Career and Financial Management (CFM)	30
College Business Law I - BUS 117	31
College Principles of Marketing - BUS 113	31
College MS Office - CIS 101	32
College Business Management - BUS 101	32
<b>Computer Science</b>	<b>33</b>
Computer Science Principles (CSP)	34
<b>English Language Arts</b>	<b>35</b>
English 9	36
English 10	36
AP English 10 - Language and Composition	37
English 11	37
AP English 11 - Literature and Composition	38
English 12	38
ELA 12: College and Career Readiness and Composition	39
College English I / Writing I - ENG 101	40
College English II / Writing II and Introduction to Literature - ENG 102	42
<b>Health &amp; Physical Education</b>	<b>43</b>
Health	44
College Healthful Living - HED 201	44
Physical Education ("PE" & "Gym")	45

<b>Mathematics</b>	<b>48</b>
Algebra IA	49
Algebra IB	49
Algebra I	49
Algebra I Lab	50
Algebra - Geometry (Alg./Geo.)	50
Geometry	50
Geometry Lab	51
Algebra II	51
Financial Topics I	52
Financial Topics II	52
College PreCalculus - MAT 116	52
College Calculus I & II - MAT 120	53
College Statistics - MAT 164	54
College MAT 102	55
Accounting	55
Electricity and Digital Electronics	56
<b>Music</b>	<b>57</b>
Symphonic Band	58
Wind Ensemble	58
Jazz Band	58
Festival Chorus	59
Select Chorale	59
Vocal Jazz Ensemble	60
College Music Theory - MUS 102	60
Music Arranging and Composition	61
Music Lessons	61
<b>Science</b>	<b>62</b>
Living Environment	63
Earth Science	63
Environmental Science	63
Chemistry	64
AP / College Environmental Science - BIO 136	64
Physics	65
College Biology I & II - BIO 109 & BIO 110	65
<b>Social Studies</b>	<b>66</b>
Global History and Geography I	67
Global History and Geography II	67

AP World History	68
American History and Government	68
AP U.S. History	69
Government and Economics	69
AP Government and Politics	70
AP Psychology	70
Media and Propaganda	71
College Introduction to Sociology - SOC 101	71
Modern Issues	72
<b>Technology</b>	<b>73</b>
Production and Manufacturing Systems	74
Land Transportation and Transportation Systems	74
Residential Construction / Material Processing	75
Robotics / Principles of Engineering	75
Electricity and Digital Electronics	76
Design and Drawing for Production (CAD DDP)	76
College CAD: Advanced Computer Aided Design and Drafting - DRF 275	77
Architectural and Structural Drawing	77
College Articulations of Tech Prep Students	78
<b>World Language</b>	<b>79</b>
Spanish 9	80
Spanish II	80
Spanish III	80
College Spanish I - SPA 203	81
College Spanish II - SPA 204	81
<b>Vocational BOCES Programs</b>	<b>82</b>
Career & Technical Education	82

# NEWFANE HIGH SCHOOL: INTRODUCTION

<b>Administration:</b>	Mr. Daniel Bedette, Principal Mr. Randall Gammiero, Assistant Principal Mrs. Jennifer Bower, Director of Special Education Mr. Chanceton Puinno, Athletic Director
<b>Counselors:</b>	Ms. Robyn Wolf, Counselor (Grades 9-10) Mr. Glenn Smith, Counselor (Grades 11-12) Mrs. Lisa Stack, Counselor (Grades 9-12)
<b>Secretaries:</b>	Miss Tiffany Loughrey, Counseling Office Mrs. Karen Flagler, Main Office Mrs. Kristin Boyer, Main Office
<b>Contact:</b>	716-778-6564 Counseling Office 716-778-6550 Main Office

This guide has been prepared to assist with the process of selecting courses of study. We strongly encourage students and parents to familiarize themselves with this publication and to use it as a resource guide.

Course offerings for the 2024-2025 school year have been reviewed carefully by teachers, counselors, and administrators, and are designed to meet the needs of students at Newfane Senior High School. Elective courses listed in this guide will be offered where sufficient student interest and availability of staffing exists.

The New York State Education Department has established standards for earning a high school diploma. **These are minimum requirements which must be met and do not necessarily meet entrance requirements established by individual colleges.** All students, and especially those planning to attend college, should take the most rigorous course of study of which they are capable.

This book describes the classes available to you. In choosing your classes you should think carefully about your talents and abilities, your interests, your goals, and your past academic performance. It is important that you consider the course descriptions and prerequisites, keeping in mind your abilities and interests and that you select courses which can contribute toward the accomplishment of your personal, educational and career goals. School counselors in cooperation with teachers, administrators, and parents, will assist each student in planning a program of study and in selecting courses.

NY State establishes graduation requirements. All students must meet the minimum graduation requirements: required courses, required Regents Exams, and minimum number of accrued credits. The level of courses, number of required courses, and the number of Regents Exams will vary depending on the diploma type.

## NEW YORK STATE REGENTS DIPLOMA

English	4 Credits	Must receive a passing grade on the Regents Exam -11th grade
Social Studies	4 Credits	Must receive a passing grade on the Global History & Geography Regents Exam - 10th grade & U.S. History & Government Regents Exam - 11th Grade
Regents Math*	3 Credits	Must pass one Regents Math Exam
Regents Science**	3 Credits	Must take three courses, at least one from the physical setting and one from the living setting, and must pass at least one Regents Exam
Foreign Language***	1 Credit	Must receive a passing grade on the Proficiency Exam and course grade 8 or take, and pass, Spanish 9 in 9th grade
Physical Education	2 Credits	Must take and pass ½ unit per year.
Art or Music	1 Credit	Must take and pass at least one course in either art <b>or</b> music
Health	0.5 Credit	Must pass Health, College Healthy Living or a BOCES health related course (Allied Health or HOT vocational program)

**Note:** Regents Exemption (“E”) scores and Special Appeals (“SA”) scores are considered passing.

## NEW YORK STATE REGENTS DIPLOMA WITH ADVANCED DESIGNATION

English	4 Credits	Must receive a passing grade on the Regents Exam -11th grade
Social Studies	4 Credits	Must receive a passing grade on the Global History & Geography Regents Exam - 10th grade & U.S. History & Government Regents Exam - 11th Grade
Regents Math*	3 Credits	Must pass three Regents Math Exams
Regents Science**	3 Credits	Must take three courses, at least one from the physical setting and one from the living setting, and must pass at least two Regents Exams
Foreign Language***	1 Credit	Must take and pass Spanish 3, plus the corresponding Regents Exam <b>or</b> must receive a passing grade on the Proficiency Exam and course in grade 8 (or take, and pass, Spanish 9 in 9th grade) plus have a 5 unit sequence (major) in music, art, business, tech/CAD, or BOCES.
Physical Education	2 Credits	Must take and pass ½ unit per year.
Art or Music	1 Credit	Must take and pass at least one course in either art <b>or</b> music
Health	0.5 Credit	Must pass Health, College Healthy Living or a BOCES health related course (Allied Health or HOT vocational program)



## NEW YORK STATE LOCAL DIPLOMA

Local Diplomas are still available but only to students who have been identified as having a disability by the Committee on Special Education or for students who have been authorized a 504 Accommodation Plan. For specifics on graduation requirements, please contact the special education counselor.

### NEW YORK STATE LOCAL DIPLOMA

The school district may award a Local Certificate (not a diploma) to a pupil who meets the criteria in accordance with the Commissioner's Regulations 200.2 and who completes an appropriate individualized education program (CDOS or SACC).

### REQUIREMENTS FOR CLASS MEMBERSHIP

At the end of the year in high school, the minimum credit requirements for the next grade placement are:

5 ½ Units	Freshman
11 Units of Credit	Sophomore
16 ½ Units of Credit	Junior
22 Units of Credit	Senior

## MARKING PROCEDURES

The pupil progress reporting system used at Newfane Central is as follows:

- A. Interim forms are mailed to parents, as needed, between report card marking periods. These reports may communicate unsatisfactory class work or explain a student's progress in a particular subject. Interim reports may also communicate excellent marks and above average progress.
- B. A student's achievement level in each class is indicated by a numerical grade on the report card.

Honor Roll	90% Average without any failing marks
Merit Roll	85% Average without any failing marks
Final Average Mark	65% or more is required to pass a course

For each course, where applicable, students are required to participate in a regents exam. For courses in which no regents exams are offered, students will take local exams. The final local exam will reflect  $\frac{1}{3}$  of the final grade. Passing a regents exam for a course will result in regents exam credit. Passing the regents exam does not satisfy the requirement for local credit.

## RANKING OF STUDENTS

- A. Students will be ranked using a numerical average minimally at the beginning and end of the year.
- B. The method used is to divide the total of students' final numerical marks for all courses passed (multiplied by the course weight factor if for weighted rank and GPA calculations) by the total number of credits earned. If a course is failed and repeated successfully, the higher grade will be used.

## HONORS AND MERIT DIPLOMA DESIGNATIONS

**Honors** - If the total average of all the exams necessary for the diploma is  $\geq 90\%$

**Merit** - if the total average of all the exams necessary for the diploma is 85% to 89.99%

- Students can receive a Regents Diploma with Honors **or** Merit

**OR**

- Can receive a Regents Diploma with Advanced Designation with Honors **or** Merit

**NOTE:** Special temporary COVID pandemic NY State Education Department policies in place for calculation of Honors, Merit, and Mastery for students with a combination of numeric and exempt ("E") scores.

# COURSE OFFERINGS BY DEPARTMENT

## **ART**

Studio in Art  
Drawing I & II\*  
Painting I & II\*  
Sculpture I & II\*  
Digital Art I & II\*

## **BUSINESS**

Accounting (alternate years with College MS Office) - Note: Counts as a math credit  
Career and Financial Management\* (alternate days)  
College Business Law (alternate years with college Principles of Marketing)  
College Principles of Marketing (alternate years with College Business Law)  
College MS Office (alternate years with Accounting)  
College Business Management\* (alternate days)

## **COMPUTER SCIENCE**

Computer Science Principles

## **DRAFTING**

CAD DDP / Design & Drawing for Production  
College CAD / Advanced Computer Aided Design & Drafting  
CAD / Architectural & Structural Drawing

## **ENGLISH LANGUAGE ARTS**

English 9  
English 10  
AP English 10 - Language and Composition  
English 11  
AP English 11 - Literature and Composition  
English 12  
ELA 12: College and Career Readiness and Composition  
College English I - Writing I  
College English II - Writing II and Introduction to Literature

## **HEALTH**

Health\* (alternate days)  
College Healthful Living\* (alternate days)  
College Allied Health (BOCES Program - senior year; 3 periods in length)

## **MATHEMATICS**

Algebra IA  
Algebra IB  
Algebra I  
Algebra I Lab  
Algebra - Geometry ("Alg./Geo.")  
Geometry  
Geometry Lab  
Algebra II  
Algebra II Lab  
Financial Topics I  
Financial Topics II

College PreCalculus  
College Calculus I\*  
College Calculus II\*  
College Statistics\* (alternate days)  
College MAT 102 (College Algebra)  
Accounting (Business Course)  
Electricity & Digital Electronics (Technology Course)

## **MUSIC**

Symphonic Band  
Wind Ensemble  
Jazz Band\* (alternate days)  
Festival Chorus  
Select Chorale  
Vocal Jazz\* (alternate days)  
College Music Theory\* (alternate days)  
Music Arranging and Composition\* (alternate days)

## **PHYSICAL EDUCATION**

Physical Education (PE" & "Gym")\* (alternate days)

## **SCIENCE**

Living Environment  
Earth Science  
Environmental Science  
Chemistry  
AP / College Environmental Science  
Physics  
College Biology I & II

## **SOCIAL STUDIES**

Global History and Geography I  
Global History and Geography II  
AP World History  
American History and Government  
AP U.S. History  
Government and Economics  
AP Government and Economics  
AP Psychology  
Media and Propaganda  
College Introduction to Sociology\*  
Modern Issues\*

## **TECHNOLOGY**

Production and Manufacturing Systems  
Land Transportation and Transportation Systems\*  
Residential Construction / Material Processing\*  
Robotics / Principles of Engineering  
Electricity and Digital Electronics (Note: Counts as a math credit)

## WORLD LANGUAGE

Spanish 9

Spanish II

Spanish III

College Spanish I

College Spanish II

\*Courses are either offered as a semester course (20 wks.) or 40 wks. in length on alternate days

---

## BOCES PROGRAMS (Grades 11 & 12)

Advanced Manufacturing and Engineering I & II

Animal Science I & II

\*Animation, Film and Visual Effects I & II - Animation (yr. 1) Film & Visual Effects (yr. 2) : **Interview required**

Auto Body Repair I & II

Automotive Technology I & II

\*Building Maintenance and Management I & II

Building Trades I & II

Certified Personal Trainer I & II

Computer Technology I & II

\*Conservation I & II

Cosmetology I & II

Culinary Arts I & II

Diesel Technology / Heavy Equipment / Agriculture Mechanics I & II

Early Childhood Education I & II

Electricity / Electronics I & II

\*Emergency Medical Services I & II - First Responder (yr. 1) EMT (yr. 2)

\*Fashion Design / Interior Decorating I & II

Graphic Communications I & II

Health Occupations Technician I & II

\*Heating, Ventilation, Air Conditioning (HVAC) I & II

Security and Law Enforcement I & II

\*Web Development and Game Programming I & II

Welding I & II

\*Programs only offered at the Niagara BOCES Center

# **GUIDANCE AND COUNSELING SERVICES**

## **Who is your school counselor?**

The staff consists of professional counselors who have earned advanced degrees in counseling and who are trained and experienced in helping students work through personal, social, emotional, and academic problems and in guiding educational and vocational planning. You may enlist the aid of your counselor to identify interests, aptitudes, and career goals and to clarify diploma requirements. If personal problems are interfering with success in school, don't hesitate to talk with the counselor.

## **When to see the Counselor?**

Should you be in doubt as to whether you should see the counselor regarding a particular problem, you should simply ask for an appointment. You may come to the guidance office to discuss any question or problem that concerns you. If a counselor cannot be of assistance, they will refer you to the agency or person who can provide the information or help that is needed.

## **Counseling**

Counseling is a student-counselor relationship in which a student has the freedom to express ideas and feelings. The student is encouraged to seek information and examine alternate courses before acting. Counseling seeks to help students assume responsibility for making plans and decisions.

## **Confidentiality**

Everything said within counseling interviews is confidential. No information is released to any individual outside the school except with the approval or upon request of the student or in the case of possible physical harm.

## **Education Counseling**

The counselor shows how interests, aptitudes and abilities work together. Through various activities they provide information about careers and about the various opportunities for post-high school education. They provide facts about the many available technical schools, apprentice programs, and vocational programs. For those desiring employment immediately after high school, the counselors provide occupational information. Students thinking about military service should first start with a conversation with their counselor. There are different avenues to consider (ie. enlistment, delayed enlistment, ROTC, etc.) that are available. Military recruiters routinely visit our school making themselves available to interested students.

## **Student Appraisal**

The counselor gathers and organizes information about students from grades, standardized tests, information forms, and conferences with parents, teachers, and students. They interpret this information to the student and parents to help the student deal with needs and problems that may present themselves.

## **High School Guidance Office Web Page**

The Newfane High School Guidance Office has a web page on the district's website. Our web page can be accessed by going to [www.newfane.wnyric.org](http://www.newfane.wnyric.org), click on the High School, and then High School Guidance. We are continually updating and adding to our web page in an attempt to include useful information and links for both parents and students. We have included a wide array of helpful information/links such as: graduation requirements, special education information, scholarships (downloadable applications or links to applications), contact numbers, financial aid, NCCC/GCC/NU transcript request form, athletics, college admissions, SAT/ACT registration, to name a few.

## GLOSSARY OF TERMS COMMONLY USED IN HIGH SCHOOL

1. **Unit of Credit** - The value given to a course which is pursued five (5) periods a week for a minimum of 40 minutes for each period for a school year and involving an equal amount of time in preparation outside of the classroom. Laboratory courses and music may require extra class.
2. **Marking Period** - Teen week period.
3. **Semester** - One half of a school year.
4. **One half unit of credit** - Usually granted for the successful completion of a subject studied one period a day for one semester, or alternate days for the full year.
5. **Required subjects** - Those subjects needed for graduation. These are subjects all students must take to meet state or local requirements.
6. **Electives** - Subjects which are not required of all students but are chosen by the student. These are often used to meet “major” requirements.
7. **Prerequisites** - The requirements which a student must meet in order to be eligible to take a given subject.
8. **Corequisites** - Courses that a student must be taking simultaneously
9. **Major** - A three (3) or five (5) unit concentration in one subject area.
10. **Regents Examination (exam)** - A test constructed by the State Education Department in specific courses.
11. **AP Exams** - Advanced Placement exams which are created by the College Board. All AP exams are given in May of each year.

### What is a Regents Exam?

A Regents Examination is a test constructed by the State Education Department for students in specific courses. The exams arrive in locked metal boxes that must be kept in a fireproof safe. Examinations are only given on certain days, and times in January, June, and August. The principal is not allowed to make any exceptions pertaining to Regents examinations for any reason. A student must pass a minimum of five Regents Exams to meet graduation requirements.

### World Language (“Foreign Language”) Credits

Students who have passed the Spanish second language proficiency with  $\geq 65\%$  in addition to passing the Spanish class at the end of their eighth grade year will receive one unit of credit and can enroll in level 2 of the language.

Those who fail the proficiency examination, and/or fail the Spanish 8 class, and do not earn credit recovery (“summer school” credit - if offered), will be placed in level 1 (Spanish 9) of the language and will earn 1 high school credit once the student earns a final average of 65 or higher.



# IMPORTANT COLLEGE ENTRANCE EXAMS AND EXAM PREPARATION

## PSAT EXAM

This test is given primarily to juniors each year in October. This exam is a College Board test, which also creates the SAT exam. It is a great practice opportunity for students to simulate the actual SAT exam as the questions are very similar. The PSAT does NOT have a writing section. Students who do well on the PSAT exam may be eligible for a National Merit Scholarship.

## SAT EXAM

The SAT exam scores are one of the top three criteria used by four-year college admissions personnel to determine acceptance. Students are advised to take the PSAT in the fall of their Junior year, followed by the SAT in the spring of their Junior year. Students should consider taking this exam at least twice in order to obtain the highest possible scores in each section. Colleges will use the highest component scores regardless if they are from the same exam or not. The SAT exam is given several times at local high schools throughout the year.

## ACT EXAM

As with the SAT exam, ACT scores are also used by four-year college admissions personnel to determine acceptance. The ACT is another college entrance exam offered through a different company. Both exams are 50% English related questions, this test differs slightly from the SAT in other components. Science reasoning and math make up the remaining 50%. If students do not do well on the SAT exam, or are not strong in math, the ACT would be worth investigating. This exam is given several times at local high schools throughout the year.

**NOTE:** Due to COVID/Post-COVID, many four year colleges have made the requirement for an SAT or ACT, test score optional (“test optional”) for admissions. Students who earn good test scores are encouraged to use them for admissions review. NCAA: Div 1 & 2 student athletes will probably need an SAT or ACT for certification. Newfane is not a test center for the SAT or ACT exam but there are several high schools that are designated test centers.

## SAT AND ACT PREP

Students should take as many rigorous courses as possible while in high school. This prepares them for college admissions, work, military enlistment (ASVAB test) and SAT/ACT test preparation. In addition to taking challenging coursework, students who plan to take an SAT or ACT exam can access free online test preparation. The College Board has partnered with the Khan Academy:

<https://www.khanacademy.org/>. The ACT testing company also has comparable free test preparation at: <http://www.act.org/content/act/en/products-and-services/the-act/test-preparation/free-act-test-prep.html>. All Pro Tutoring (<http://allprotutoring.com/>) is a test prep company that offers test prep courses at reasonable prices and they also offer a free simulated SAT or ACT test for students.

# SCHEDULING

## Choosing High School Subjects

The following general suggestions are offered regarding the choice of subjects: (final choices must be based upon eligibility, individual interests, abilities and goals).

1. Consider taking challenging/rigorous courses if you are eligible, have an interest in the subject, are willing to put in the extra work, and have good attendance. College admissions officers like to see course rigor and “grit” (perseverance) on applicant transcripts. If you are eligible to take advanced placement (AP) or college level courses, consider doing so. College and AP courses are weighted higher which helps raise student cumulative Grade Point Averages (GPA) and typically improves student class rankings.
2. In general, students who are college-bound should take as much math, science and foreign language as they can handle. Though NY State graduation requirements dictate the minimum number of credits in each area, students often have the ability to take additional, and higher level, courses.
3. All of our college and AP course college credits can apply towards required college general education elective requirements or can be directly applied towards college majors.
4. In addition to required courses, students will have the opportunity to take elective courses each year. Students should choose electives that they enjoy, have an interest in, and/or will help them meet eligibility requirements for particular college majors or employment.
5. Future engineering, architecture or drafting majors should have at least 1 year of computer aided drafting (CAD) plus they should take higher levels of math and science (physics is highly recommended).
6. Students anticipating a career in a health area (nursing, PT, PA, pharmacy, etc.) are highly encouraged to continue taking advanced math and science courses. These health related college programs are typically very competitive and advanced course credit is helpful.
7. It is highly recommended that all students should take a computer class sometime during high school to help prepare them for future college work or the workforce.
8. All Regents science classes require lab periods in addition to class periods. A student will not be allowed to take the Regents Exam if the required minimum number of labs/lab hours are not completed.
9. The average student schedule is 6 credits per year, plus physical education. This allows for one study hall per day and a study hall opposite their physical education and lab. Students have the ability to add additional elective courses if they so desire.

## Course Changes

Students can make requests for course changes up until the completion of the first full week of classes in September, provided the new class requested is not at maximum capacity.

The cutoff date for making course selections or changes for the upcoming school year will be the last day of June. Student changes after that date will not be honored unless the student entered the school district during the summer months. This must be adhered to if we are to schedule for the upcoming year with any degree of stability.

## Procedure For Processing A Request To Drop A Course

In order to maintain the integrity of our academic programs, the Newfane High School Policy dictates that students will be annually scheduled for six credits of courses, plus phys. ed., and they should attend and complete the courses for which they were originally scheduled.

Students and parent(s)/guardian(s) are advised that they should carefully consider this policy at course selection time and that selection of courses at that time represents a firm commitment to scheduling decisions.

Course changes may occur due to scheduling errors, course conflicts, or changes due to summer school remediation results and these will be addressed. We recognize that situations arise where a student's interests, goals, or future plans may have changed necessitating an educationally valid reason for a scheduling change. In these rare instances, it may be in the best interest of the student to request a scheduling change. **Scheduling change requests will only be honored up until the completion of the first full week of classes in September.** If a new class is being added/substituted, class sizes, eligibility, prerequisites, and future plans will need to be considered. In all cases, graduation requirements, to include student credit accrual (yearly and cumulatively), take top priority and will need to be adhered to.

## **AP and College Course Attendance Prerequisite**

1. Any student requesting to take a college or AP level course must have less than 10% unexcused absences from that subject in the prior year.
2. If a student has more than 10% unexcused absences, they will need a recommendation from their subject area teacher or the principal to take the course.
3. If the student does not have the recommendation from the teacher mentioned in #2 or the principal, the parent and student can request piloting the class for 5 weeks to determine if they can meet rigor and requirements of the class. Requests will be considered by the teacher of the course, the counselor, and the principal.

## **BOCES Vocational Center Enrollment Procedures**

Enrollment at the BOCES Vocational Center is available only to those students who have completed requirements for 11th grade or higher. A certified 11th grade student must have successfully completed eleven units of credit including English 9 and 10, Global History and Geography I & II, and two units each of Math and Science.

Allocations for BOCES programs will be made in the spring for students who have a passing average in courses required to be a certified 11th grade student or higher.

**ANY PROGRAM CHANGES MADE AFTER THE REGISTRATION DEADLINE WILL RESULT IN BEING WAITLISTED, WITH NO GUARANTEE OF ENROLLMENT IN A PROGRAM.**

**STUDENTS ARE EXPECTED TO REMAIN IN ATTENDANCE AT THE CENTER FOR THE LENGTH OF TIME NECESSARY TO COMPLETE THE PROGRAM - OR AT LEAST COMPLETE THE CURRENT YEAR.**

## Tech Prep College Credits

The Engineering Technology Facility of Niagara County Community College, Mechanical, Electrical, and Drafting Programs have agreed to provide advanced placement of Tech Prep students into the listed classes:

2	MET 510	Engineering Drawing DDP
1	TEC 501	Technical Calculations Computer Literacy
2	DRF 573	Introduction to CAD
2	TEC 550	Robotics
2	TEC 519	Digital Electronics I

Conditions of advanced placement are: Satisfactory completion of equivalent high school course with a grade of 90% or higher, recommendation of high school instructor, and a completed application after completion of the course.

Those students desiring to receive college credit for listed courses will be required to demonstrate competency of the subject through performance and/or written examination. Competency testing materials will be designed, administered and evaluated by the discipline coordinator and an appropriate faculty member.

Students who meet the criteria and apply for these articulated college credits must attend Niagara County Community College to make use of these credits. Courses will apply to their associated major as transfer credits.

## College Requirements for Various Fields of Study

### Engineering

Strong achievement in math and science is required. Four years of high school math and science, including physics and chemistry are **highly recommended**, as well as two years of drafting (CAD). English speaking and written communication skills are very important. Consider also technology courses, foreign language, a fifth year of math, and a third year of drafting (CAD).

### Medicine, Dentistry, Pharmaceuticals, Veterinary Medicine

Require sound preparation in science and math. Students should take a minimum of four years of math, four years of science to include biology, chemistry, and physics, as well as at least three years of foreign language. College Biology and a fifth unit of math are recommended.

### Art and Music

Recommended high school work in a special field (art or music) are part of a balanced academic high school program. Many schools accepting art or music majors require a portfolio or an audition. An emphasis on as many art electives as possible from grade 9 on as well as a background in drafting is recommended. Music theory will also be required for auditions. Foreign language and history should also be considered.

## **Health Careers**

Three years of math in addition to living environment and chemistry are required for a registered nurse program typically offered at a hospital, school, or community college. Four year college nursing programs still recommend three years of math and two to three years of science. Physics, AP psychology, and College Biology should also be taken.

## **Law/Public Service**

A well-balanced high school program including mathematics, science, foreign language, humanities, public speaking, and history. You should also consider an additional English elective and College Business Law.

## **Teaching**

Those who wish to prepare for a high school academic or specialized field will take more high school academic or related specialized courses. Those who plan to teach in elementary school will also be required to minor in some particular subject area in college. High school courses in music, art, and science are recommended. A minimum of three years of math, science, and foreign language is also recommended as well as Psychology elective.

## **Professional Business Careers**

The high school program should include the pattern of subjects for Liberal Arts - (English, social studies, mathematics, science, and foreign language). High school business electives, many of which are offered for college credit, should be included.

## **High Tech Careers**

Four years of math, biology, chemistry, physics, and three years of a foreign language are recommended. You should also consider a fifth unit of math and computer courses.

## **Humanities and Social Sciences**

Three years of math, science, and world language is recommended.

## **CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES (CDOS)**

### Career Development and Occupational Studies (CDOS)

This course work is designed to fulfill one of the requirements for students with disabilities (fulfillment of CTE coursework) pursuing CDOS commencement credential (Option 1), CDOS commencement credential requirements include:

- Development of a Career Plan
- Demonstrated achievement of the commencement level CDOS learning standards
- Successful completion of at least 216 hours of CTE coursework, and at least 54 hours of work based learning
- Employability profile

## **CAREER AND TECHNICAL EDUCATIONS (CTE)**

### Career and Technical Education (CTE)

1. CTE Technology Education
  - a. This course is designed to provide students with a working knowledge of the basic uses of carpentry. The course gives students a better understanding of how technology can be used in their daily lives and has a strong emphasis on proper procedures and safety standards. The course will also address careers in technology and focus on what people in these career areas do to fulfill the obligations of that trade.
2. CTE Family & Consumer Sciences
  - a. Students will practice the principles of nutritious cooking and apply them in food preparation. Focuses include recipe reading, oven cooking, safety, and sanitation. Lab experiences will include cooking and baking a variety of items throughout the school year. Students will learn how to work as a team in their own kitchen in addition to following directions accurately. Skills learned in this course are related to careers in the food service industry.

# NEWFANE SENIOR HIGH SCHOOL PROGRAM PLANNING

## Four Year Planning Sheet Example

September 2024 Entered Grade 9

Graduation June 2028

Student: \_\_\_\_\_ Student ID Number: \_\_\_\_\_

Phone: \_\_\_\_\_ Student Email: \_\_\_\_\_

Student Mailing Address: \_\_\_\_\_

### 1. Post High School Plans:

**Career Plans:** After completing my formal education, I plan to be working as a

\_\_\_\_\_

**Education Plans:** To prepare for my career, I will enter:

A Two Year College

The Armed Services

A Trade/Tech School

A Business School

A Four Year College

The Work Force

**If you plan for further education, what will be your major field of study?**

\_\_\_\_\_

### Graduation Requirements:

<u>Subject</u>	<u>Units Needed</u>
English Language Arts	4
Social Studies	4
Mathematics	3
Science	3
Art or Music	1
Health	0.5
World Language	1* (3 units, and Span. 3 Regents, needed for Advanced Regents Diploma**)
Physical Education	2 (0.5 per year)

\*At the minimum, students need to pass Spanish 1 and the SLP exam ("Checkpoint A") for graduation. Students who do not pass Spanish 1, and/or the SLP exam, in grade 8 must take and pass Spanish 9 at the high school.

\*\*Students who wish to receive a Regents Diploma with Advanced Designation need to pass the Spanish 3 course and the Spanish 3 Regents Exam (Checkpoint "B"). Alternative: Students who do not continue in Spanish after Spanish 1, up to and including Spanish 3, can still receive an Advanced Regents Diploma by taking a five credit sequence in career technical education, art, or music instead.

**Credit Requirements:** A minimum of 22 credits is required for a Regents Diploma. All courses required for a Regents Diploma must be Regents level with a passing grade on the Regents exam and course credit. A sequence is a specified number of credits in one subject area. All advanced Regents Diploma students must choose one of the following: A 3 unit sequence in world language OR a 5 unit sequence in career and technical education or the arts.

**Regents:** All students must take and pass a regents exam in the following subjects: Math, English, Global Studies, U.S. History, and Science.

**Diploma:** I expect to complete a major in: \_\_\_\_\_

**Student:** I understand that it is my responsibility to give careful thought to my choices and discuss my plans with my counselor and my parents.

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_



NAME \_\_\_\_\_

Student ID Number: \_\_\_\_\_

**5. HIGH SCHOOL PROGRAM**

**GRADE 9 (2024-2025)**

English 9  
 Global History & Geography I  
 Living Environment  
 Math \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Physical Education

**GRADE 10 (2025-2026)**

English 10  
 Global History & Geography II  
 Earth Science  
 Math \_\_\_\_\_  
 \*Health \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Physical Education

**GRADE 11 (2026-2027)**

English 11  
 U.S. History & Government  
 Chemistry  
 Math \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Physical Education

**GRADE 12 (2027-2028)**

English 12  
 Government & Economics  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Physical Education

\*The required ½ unit of health is recommended to be taken in the Sophomore year, leaving the option of a half credit class or a study hall.

***High School Policy mandates a minimum course load of 6 credits plus physical education each semester.***

**Regents Exams:**

	P	F		P	F		P	F		AR	R	LOCAL	NYS CDOS	SACC	GED
Algebra I			Chemistry			ELA			Diploma Type						
Geometry			Physics			Spanish 3				Honors	Merit	Mastery Math	Mastery Science		
Algebra II			Global II			SLP Spanish			Diploma Distinction						
Living Env.			U.S. History												
Earth Science									Career Pathway						

**7. COUNSELOR REVIEW**

The high school counselor will review the program planning worksheet each year. If there appear to be any discrepancies between the courses selected and the goals as stated on Side I, the counselor will contact the student and parent with recommendations.



# **Course Description Section**

# Art

*Mrs. Lee O'Keefe*

*Mrs. Jessica Tabone*

## **Course Offerings Include:**

Studio in Art

Drawing I & II

Painting I & II

Sculpture I & II

Digital Art I & II

# ART

## Studio in Art

**Grade: 9, 10, 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

Required for majors and also meets graduation requirements for all students. You will explore the principles and elements of design through a variety of media: pencil, modeling dough, collage, pastels, paints, markers, and more. The art elements will be studied through projects in painting, sculpture, drawing, and design. This course is for all who enjoy art and want to improve their artistic skills. You will be exposed to a variety of projects and develop an appreciation of arts, past and present.

## Drawing I & II

**Grade: 10, 11, 12**

**Length: 20 Weeks Each / Semestered**

**Final Exam: Local**

**Credit: 0.5 / Semester**

**Prerequisite: Studio in Art**

**Offered: Each Year**

This is a course during which students will learn to draw using pencil, pen and ink, charcoal, colored pencil, and oil pastel. They will experience a variety of exercises proven to strengthen hand-eye coordination, visual/spatial perception, and right-brain thinking. Students will draw from real-life observation, photographs, and their imagination. This is a rigorous course of study designed to achieve marked improvement and results.

## Painting I & II

**Grade: 10, 11, 12**

**Length: 20 Weeks Each / Semestered**

**Final Exam: Local**

**Credit: 0.5 / Semester**

**Prerequisite: Studio in Art & Drawing**

**Offered: Each Year**

This course will teach students the techniques and skills for using watercolors, oils, and acrylics to paint scenes, people, and still-life. Students will learn how to mix and properly use colors and how to compose a painting. The history and development of painting will be studied through its periods and artists. This course will give students the foundation to compose and execute a painting independently.

## **Sculpture I & II**

**Grade: 10, 11, 12**

**Length: 20 Weeks Each / Semestered**

**Final Exam: Local**

**Credit: 0.5 / Semester**

**Prerequisite: Studio in Art**

**Offered: Each Year**

This course was designed to give students an opportunity to develop their ideas in three dimensions. Students will study the historical development of sculpture, the methods of sculptural expression, and the principles and elements of designing relief and free-standing sculpture. Students will learn to build armatures, model, carve, cast, and build-up in clay, plaster, wood, wire, and a combination of these and other media. This course will give students the knowledge to choose a technique and develop it with their own style.

## **Digital Art I & II**

**Grade: 10, 11, 12**

**Length: 20 Weeks Each / Semestered**

**Final Exam: Local**

**Credit: 0.5 / Semester**

**Prerequisite: Studio in Art & Drawing**

**Offered: Each Year**

This course will combine digital art media and procedures currently used in college programs and careers in the arts to prepare students for future artistic endeavors. This course will utilize Adobe Photoshop and Adobe Illustrator to create digital arts including graphic design, advertisements, illustrations, digital-photography, and other digital media content, giving students exposure and foundational knowledge to pursue digital arts and graphic design.

# Business

***Ms. Wendy Geise***

**Course Offerings Include:**

Accounting

Career and Financial Management

College Business Law I

College Principles of Marketing

College MS Office

College Business Management

# BUSINESS

## Accounting

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1

Prerequisite: None

Offered: Every Other Year  
**NOT OFFERED 2024-2025**

This course is designed to develop initial occupational competency in this subject. Upon completion of this study, the student should be able to analyze business transactions, handle bookkeeping activities, Utilize source documents, complete business forms, prepare a payroll with employee deductions and employer's taxes, and other accounting functions. Recommended for business majors as well as any student planning to enter a business program in college.

This course may be used as a third math credit in a sequence of three math courses for a Regents Diploma.

## Career and Financial Management (CFM)

Grade: 10, 11

Length: 40 Weeks / Alternate Days

Final Exam: Local

Credit: 0.5

Prerequisite: None

Offered: Each Year

What do you want to do to earn a living? Explore your options in this class. Students will identify their strengths and weaknesses, interests, and attitudes in an effort to match these to an exciting career choice. Students will investigate and research different career areas, examine job leads, prepare a resume, and complete a mock interview. Once the career section of the class is over, students will begin to concentrate on employer/employee expectations and personal finances. Students gain knowledge of budgeting, keeping a checking/savings account, income taxes, and introduction to consumerism and making smart decisions.

## College Business Law I - BUS 117

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 3 College

Prerequisite: None

Offered: Every Other Year

**NOT OFFERED 2024-2025**

This course centers around the premise that we, as citizens, are exposed to numerous aspects of the law in our everyday lives. In addition, the course has great practical value, providing background for professional explorations and illuminating the problems of private life. Students will have the opportunity to participate in debates and a mock trial. **Students may receive three college credits if they successfully complete the course requirements and registration.**

*\*Please reference the AP & College Course Attendance Prerequisite.*

A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.

## College Principles of Marketing - BUS 113

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 3 College

Prerequisite: None

Offered: Every Other Year

This course introduces students to marketing and its nine functions. Students learn about the process of marketing a product from its beginning stage of production through the last stage of distribution. The class researches the U.S. economy as well as global economies. Many hands-on activities are used to reinforce the theories learned in class. Problem-solving, sales demonstrations, and public speaking are featured. The goals of this course are achieved through hands-on activities, which include sales presentations, designed advertisements, preparing radio and television commercials, and designing visual merchandise displays. This is a level 200 course: one of only a few high schools offer this in Western New York.

*\*Please reference the AP & College Course Attendance Prerequisite.*

A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.



## **College MS Office - CIS 101**

**Grade: 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1 High School / 3 College**

**Prerequisite: None**

**Offered: Every Other Year**

Using the Microsoft Office Suite software, students will learn word processing, spreadsheets, databases, desktop publishing, and presentation software. While examining basic business principles, students will learn the proper use and application of each software component. Due to the prevalence of computer applications in today's society, this course is recommended for all students who intend to continue on to college or the workforce.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## **College Business Management - BUS 101**

**Grade: 10, 11, 12**

**Length: 40 Weeks / Alternate Days**

**Final Exam: Local**

**Credit: 0.5 High School / 3 College**

**Prerequisite: None**

**Offered: Every Fall Semester**

This course starts with a history of business and a look at the country's first entrepreneurs. Communication, business, interpersonal, and entrepreneurial skills are learned. As a final project, students will design their own business model, from start-up costs to business layout. Many hands-on projects are assigned to reinforce the topics covered.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

# Computer Science

*Mr. Nicholas Kiser*

*Mr. Chuck Nagel*

## **Course Offerings Include:**

Computer Science Principles

# COMPUTER SCIENCE

## Computer Science Principles (CSP)

**Grade:** 9, 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite:** None

**Offered:** Each Year

CSP introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. No coding experience required. Just a passion to learn about computers and how they work! More than a traditional introduction to programming, it is a rigorous, engaging, and approachable curriculum that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

# English Language Arts

***Mr. A. Craig Isaacson, Curriculum Facilitator***

*Mr. Jason DiVincenzo*

*Mrs. Carrie Guba*

*Mrs. Michele Hall*

*Mr. Robert Roach*

## **Course Offerings Include:**

English 9

English 10

AP English 10 - Language and Composition

English 11

AP English 11- Literature and Composition

English 12

ELA 12: College and Career Readiness and Composition

College English I / Writing I

College English II / Writing II and Introduction to Literature

# ENGLISH LANGUAGE ARTS

## English 9

**Grade: 9**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

Reading, writing, speaking, and listening are integral parts of a student's literary education. This course focuses on literature appreciation by critically studying a variety of genres from world literature including but not limited to novels, dramas, short stories, poetry and informational text. Students are required to write literary analysis paragraphs and essays based on several works of literature read both inside and outside of class and learn to express, develop, and support ideas in writing using evidence from the text. Vocabulary development and reading strategies are stressed as a means for improving reading comprehension. Areas of grammar and usage are determined by individual student need as evidenced in compositions and are reviewed throughout the year.

## English 10

**Grade: 10**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: English 9**

**Offered: Each Year**

Reading, writing, speaking, and listening are integral parts of a student's literary education. This course focuses on a greater appreciation for literature by critically studying a variety of genres from world literature including but not limited to novels, dramas, short stories, poetry, and informational text. Students are required to write literary analysis paragraphs and essays based on several works of literature read both inside and outside of class and hone their skills in expressing, developing, and supporting ideas in writing using evidence from the text. Vocabulary development and reading strategies continue to be stressed as a means for improving reading comprehension. Areas of grammar and usage are determined by individual student need as evidenced in compositions and are reviewed throughout the year.

## AP English 10 - Language and Composition

**Grade: 10**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: English 9 & Teacher Recommendation**

**Offered: Each Year**

Student selection for this course will be based upon performance and success in English 9 and teacher recommendation. This AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing.

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## English 11

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: English 10**

**Offered: Each Year**

While reading, writing, speaking, and listening continue to be integral parts of a student's literary education, the specific objective of this course is to prepare all students for the ELA Regents exam in June. This course focuses on a greater appreciation for literature by critically studying a variety of genres from American literature including but not limited to novels, dramas, short stories, poetry and informational text. Students are required to write literary analysis paragraphs and essays based on several works of literature read both inside and outside of class and hone their skills in expressing, developing, and supporting ideas in writing using evidence from the text. In addition, there is a unique focus on language use, rhetoric, and arguments. Vocabulary development and reading strategies continue to be stressed as a means for improving reading comprehension and SAT preparation. Areas of grammar and usage are determined by individual student need as evidenced in compositions and are reviewed throughout the year. In addition, a comprehensive review for the ELA Regents exam is provided and additional review sessions for the exam will be held after school.

## AP English 11 - Literature and Composition

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: Regents, AP English Literature & Final Project**

**Credit: 1**

**Prerequisite: AP English 10 & Teacher Recommendation**

**Offered: Each Year**

Student selection for this course will be based upon performance and success in AP English 10 or English 10 and teacher recommendation. AP English Literature and Composition is designed to be a college/university-level course. Due to the workload of the course, students must be self-motivated learners, ones who enjoy reading and writing not only for pleasure, but for critical analysis as well. This course will provide you with the intellectual challenges consistent with a typical undergraduate university English literature/humanities course. Students will need to think. As a culmination to the course, you will take the AP English Literature and Composition Exam given in May (required). A grade of 4 or 5 on this exam is considered equivalent to a 3.3 – 4.0 for a comparable course at the college or university level. A student who earns a grade of 3 or above on the exam will be granted college credit at most colleges and universities throughout the United States.

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## English 12

**Grade: 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: English 11**

**Offered: Each Year**

- Students will explore a variety of literature genres, styles, and forms focusing on the trends, common themes, cultural significance, and historical backgrounds with opportunities for creative sharing in various forms and media: dramatic readings, scene recreation, short films, and cartooning.
- Students will be required to complete individual reading assignments in order to participate in both small and large group discussions.
- Students will develop skills through various modes of speech and writing including, but not limited to formal composition, research-based essays, and classroom presentations.
- Students will utilize, evaluate, and reflect on a variety of media forms: documentary films, public service announcements, television news, internet sources, blogs, and podcasts.

## ELA 12: College and Career Readiness and Composition

Grade: 12

Credit: 1

Length: 40 Weeks

Prerequisite: English 11, AP English 11

Final Exam: Local Exam / Project

Offered: Each Year

ELA 12: College and Career Readiness and Composition is organized into units that have been arranged in a logical sequence. The units scaffold skills and knowledge through five skill-based, recurring units including the **College and Career Development Process, College Reading Essentials, Becoming a Skillful Reader and Writer, The Success Principles, and Cinema as Literature**. The sixth and final unit, **Steve Jobs' Commencement Speech** served as a final project, in which students will produce a piece of persuasive writing, then orally present it to the class. While this course is designed to meet the New York State ELA Learning Standards in reading, writing, listening, and speaking for 12th grade, it also provides a practical aspect in preparing to be successful after high school. While many of the assignments listed hereafter will focus on the reading and discussion of content, much emphasis will be placed on the students' written interpretations. Composition assignments will include statements, paragraphs, and formal essays. **No matter the kind of writing assigned, students are expected to put forth their best skills and write in standard written English using proper grammar and punctuation.**

### What Students Will Accomplish:

- Improve Research Skills
- Improve Reading Comprehension
- Improve Writing Skills
- Improve Public Speaking Skills
- Improve Leadership Skills
- Write a College Research Paper
- College Admissions Process
- Apply for Scholarships
- Improve Life Skills for College and Careers



# College English I / Writing I - ENG 101

Grade: 12

Length: 20 Weeks / Fall Semester

Final Exam: Local

Credit: 0.5 High School / 3 College

Prerequisite:  $\geq 80\%$  Cumulative GPA,  
and  $\geq 80\%$  on ELA Exam

Offered: Each Year

This course, based on writing as a process as well as rhetorical principles, is designed to develop effective, non-fiction prose. Students will learn the use of documentation within the Modern Language Association (MLA) format.

## I. Course Organization/Methods of Evaluation

Central to the organization and methods used by the instructor in ENG 102 is the English department's commitment to: writing as a process; writing as a form of communication; writing as a vehicle for critical thinking; writing as a way to learn; and writing as a means of challenging perceptions, assumptions, and values.

## II. Course Objectives/Student Learning Outcomes

### A. *Writing as Process*

Although it is assumed that all students in ENG 101 have a working knowledge of standard American English and basic writing skills such as mechanical correctness and syntax, at the completion of this course, the student will acquire a working familiarity with writing as a process beyond the acquisition of those basic skills.

Part of the process will include but is not limited to learning

1. the relevance of audience and purpose
2. the process of invention and writing strategies
3. the uses of organizational structures appropriate to the writer's purpose
4. the use and variety of syntactical structures
5. precise and appropriate diction
6. revision strategies
7. editing and proofreading skills as well as the use of MLA documentation procedures.

In addition, the course is committed to the philosophy that writing is a relatively open-ended process and the one one "test" or evaluation tool can be used to evaluate the comprehensive effectiveness or the student writing. Within the time constraints of a semester, however, it is recommended that the "process" of student writing include a variety of writing experiences, as well as a variety of levels and degrees of developed writing (detailed below).

## **B. Critical Thinking**

The instructional approaches of the course support the development of students from those who received knowledge to those who construct knowledge. That is, the goal to move students from those who see issues as uncomplicated and demonstrate polarized thinking toward those who recognize complexity in issues.

Evidence of this development in student writing is demonstrated in the following:

1. Students move from writing that offers facts and details with little interpretation to writing that develops ideas in depth, suggesting casual relationships and connections among ideas.
2. Students move from writing by formula (the five paragraph essay) toward writing that includes the discovery of new meaning as well as the clear presentation of ideas.
3. Students move from categorical language and cliché toward writing that presents ideas in complex terms, showing evidence of the development of new relationships between ideas and synthesis of ideas into new frameworks.
4. Students move away from writing that categorically opposed those with whom they disagree toward writing that recognizes another viewpoint and acknowledges different assumptions, contexts, knowledge bases, and perceived weight of evidence underlying various positions.
5. Students move from writing that cites “authorities” who agree with them toward writing that takes into account relevant reasons and evidence that support views different from their own.
6. Writing assignments that require revision, develop a thesis, draw on primary and secondary sources, including scholarly articles, the use of MLA system of documentation will count more heavily in evaluation than writing assignments that do not.

## **C. Writing that requires students to work in a variety of rhetorical strategies**

At the completion of this course, students will:

1. Create college-level texts in which they develop well-reasoned arguments.
2. Demonstrate the ability to revise and improve well-reasoned arguments.
3. Developed the ability to locate, evaluate, and incorporate research from a variety of scholarly outside sources.
4. Document primary and secondary sources, including scholarly articles, using correct MLA documentation.
5. Identify, analyze, and evaluate arguments as they occur in their own or others’ work.
6. Demonstrate the ability to use the conventions of literary analysis, genre distinctions, and literary devices in reading to analyze literary texts.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## College English II / Writing II and Introduction to Literature - ENG 102

Grade: 12

Credit: 0.5 High School / 3 College

Length: 20 Weeks / Spring Semester

Prerequisite: College English I

Final Exam: Local

Offered: Each Year

This course reinforces writing skills emphasized in ENG 101 (Writing 1); presents more sophisticated writing skills, not included in ENG 101; and introduces students to the study of literature. Students will use writing to promote critical thinking.

### I. Course Organization/Methods of Evaluation

Central to the organization and methods used by the instructor in ENG 102 is the English department's commitment to writing as a process; writing as a form of communication; writing as a vehicle for critical thinking; writing as a way to learn; and writing as a means of challenging perceptions, assumptions, and values. English 102 functions as a complement to English 101.

There will be substantial writing required in this course. The writing may be both informal and formal, non-graded and graded, writing to discover ideas as well as writing to present ideas.

Evaluation will be accomplished within the framework of college policies.

### II. Course Objectives/Student Learning Outcomes

At the completion of this course, students will:

- A. Create College-Level texts in which they develop well-reasoned arguments appropriate to the writer's.
- B. Demonstrate the ability to revise and improve well-reasoned arguments.
- C. Develop the ability to locate, evaluate, and incorporate research from a variety of scholarly outside sources.
- D. Document primary and secondary sources, including scholarly articles, using correct MLA documentation.
- E. Identify, analyze, and evaluate arguments as they occur in their own or others' work.
- F. Demonstrate the ability to use the conventions of literary analysis, genre distinctions, and literary devices in reading to analyze literary texts.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

# Health & Physical Education

*Miss Megan Forsyth*

*Mr. Eric Klumpp*

*Mr. Chuck Nagel*

## **Course Offerings Include:**

Health Education

College Healthful Living

Physical Education

# HEALTH

## Health

Grade: 10, 11, 12

Credit: 0.5

Length: 40 Weeks / Alternate Days

Prerequisite: None

Final Exam: Local

Offered: Each Year, Each Semester

- Students will learn valuable material in managing stress and dealing with mental health issues that increasingly affect our body, mind, and social interactions.
- Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks by analyzing the influence of culture, media, technology, and other factors on health.
- Students will understand that interpersonal communication skills are very important when dealing with certain situations.
- Students will use their abilities for goal setting and decision-making to enhance their health, and will have the ability to influence and support others in making positive health choices.
- Students will learn concepts to disease prevention and knowledge to lead healthy lifestyles.
- NCS has partnered with Niagara County and Resources for adolescent problems to bring in speakers that help educate students about behavioral decision making.

Students are now required to be instructed in “hands only” CPR.

Every student is provided a 2” binder, 4 dividers, loose leaf paper, and a book cover.

Students will need their chromebook for every class.

## College Healthful Living - HED 201

Grade: 9, 10, 11, 12

Credit: 0.5 High School / 3 College

Length: 40 Weeks / Alternate Days

Prerequisite: None

Final Exam: None

Offered: Each Year

A comprehensive overview of current health and wellness themes that will assist students in critical thinking and making well informed decisions regarding health related issues. Topic areas include drug misuse and abuse, nutrition and weight management, stress reduction, cancer prevention, benefits of sleep, cardiovascular disease and others. Completion of this course fulfills the State Education mandated Child Abuse Recognition and Reporting, Drug Education for Teachers and Schools Against Violence seminars.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

# PHYSICAL EDUCATION

## Physical Education (“PE” & “Gym”)

Grade: 9, 10, 11, 12

Credit: 0.5

Length: 40 Weeks / Alternate Days

Prerequisite: None

Final Exam: None

Offered: Each Year, Each Semester

Physical Education is an integral part of the educational experience at Newfane High School. Participation in class is an opportunity for students to develop valuable motor skills and socially appropriate behaviors fundamental to successful adulthood. In meeting the New York State Physical Education Standards, our priority is to expose students to a variety of activities and provide information promoting wise and healthy decision-making throughout the student’s lifetime. Students will need their chromebook for every class.

**NOTE:** PE / Gym final grades are used in the calculation of student cumulative GPA's

### NEW YORK STATE EXPECTATIONS:

- You must pass 4 years of High School Physical Education to graduate!

### NEWFANE HIGH SCHOOL PHYSICAL EDUCATION EXPECTATIONS:

- Give your best effort in class
- Students will be responsible young adults. Know what’s right - do what’s right!

### COURSE OBJECTIVES

- Students will maintain a safe and healthy environment throughout PE class by being respectful of their classmates, teachers, and PE equipment
- Students will work to the best of their ability
- Students will take the lifetime skills introduced and reinforced during physical education into the “real world” to use for fitness and recreation

### DAILY CLASSROOM PROCEDURES AND ATTENDANCE:

- Students will enter and exit through the gym doors - no one should be coming from the locker room
- Locker Rooms will be optional for students who wish to use them
  - These are only for kids who are changing
  - Locker rooms will be locked after all students are out. No one will be allowed in the locker room until class ends (4 minutes prior to bell ringing)
- Students will grab their attendance card and place it on the teachers cart
- Punctuality is important, tardies will result in a 25% grade reduction for the participation grade
- Leaving class before the bell rings will result in a 0
- **NO STUDENTS ARE ALLOWED TO BE IN PE DURING STUDY HALL / LUNCH**

## PREPARED FOR CLASS:

- Prepare for the weather, we will be going outside on most nice days
- Use of the locker room is optional, but will give the first 4 minutes of class to do so
- Dress Code
  - Sneakers with socks (morning classes bring old / extra sneakers and socks)
    - NO CROCS, SANDALS, BOOTS
    - Inappropriate footwear will result in a 50% deduction in grade
  - Shorts and / or sweatpants
  - Snow pants for the cold weather
  - T-shirts and / or sweatshirts
  - Appropriate fitting
  - NO offensive language or artwork
  - Jackets and gloves for the cold weather

## USE OF LAVATORY DURING PE CLASS:

- ONE girl & ONE boy allowed out of the class at the same time
- Hallway bathrooms must be used - NO ONE is allowed in the locker room during class

## CELL PHONE / AIRPOD POLICY:

- Keep them in your backpack or locker during PE class. We do not want to see them.
  - 1st Offense = Warning
  - 2nd Offense = Phone taken to office
- If we are in the gym there are absolutely NO AIR PODS OR CELL PHONES
  - Outside, fitness room and the track you allowed to bring your phone

## GRADING:

- Each student receives a numerical grade between 0% - 100% per quarter
- Effort, attitude, social interaction and safety determine the PE grade
  - \*\*based on the participation rubric (Posted on PE website)\*\*
  - 70% = Participation
  - 15% = Written Work & Quarterly Tests
  - 15% = Skill Growth Assessment

### ATTENDANCE EXCEPTIONS

- Doctor's Excuse (injury, illness, etc.) - Will be issued hand written medical make up work
- Athletic Event
- Band/Chorus/Fieldtrip
- Class Cut = - 4 pt deduction with ZERO make-up opportunity
- ATHLETES - Need to be prepared and participate in PE the day of their athletic event or they will **NOT BE ELIGIBLE** to participate after school in their game
- Doctor/dentist appointments **DO NOT** count as an excused absence. Classes missed for these appointments will need to be made up

## **PHYSICAL EDUCATION MAKE UP CLASSES:**

- Physical Education make up classes will be offered the last 5 days of the marking period
- Students will only be allowed to make up 5 missed classes
- Make ups will be offered after school 2:30-3:05 in the gym based on the unit of study at the time
- PM BOCES students can make up classes by going into another teachers class ( with their permission)
- Sports practices do not count as a make up class
- Students making up a class need to have sneakers on (crocs/boots/sandals will not be allowed)
- Students who have missed for a doctor or dentist appointment have the option to write a 1 page paper based on a PE related topic



# Mathematics

***Mr. Joseph Najuch, Curriculum Facilitator***

*Mrs. Alexandra Jaruszawicus*

*Mr. Andrew Levinton*

*Mr. Jacob Oddy*

## **Course Offerings Include:**

Algebra IA (Algebra I split course - part 1)

Algebra IB (Algebra I split course - part 2)

Algebra I

Algebra I Lab

Algebra - Geometry (Alg./Geo.)

Geometry

Geometry Lab

Algebra II

Algebra II Lab

Financial Topics I & II

College PreCalculus

College Calculus I & II

College Statistics

College MAT 102

Accounting

Electricity and Digital Electronics

(Accounting: Math credit available through the Business Department)

(Electricity and Digital Electronics: Math credit available through the Technology Department)

# MATHEMATICS

## Algebra IA

**Grade:** 9

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite:** None

**Offered:** Each Year

This class is the first portion of Algebra I. The pace is set to provide students with a more in-depth understanding of the concepts covered in the course. Students are enrolled by teacher recommendation, state assessment results, and administrative approval. The remainder of the Algebra I content will be covered in Algebra IB.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all exams. Student chromebooks will also have a TI graphing calculator app for at home use.

## Algebra IB

**Grade:** 10

**Length:** 40 Weeks

**Final Exam:** Algebra I Regents Exam

**Credit:** 1

**Prerequisite:** Algebra IA

**Offered:** Each Year

This class is the second portion of Algebra I. The pace is set to provide students with a more in-depth understanding of the concepts covered in the course and to allow students to prepare for the Algebra I Regents exam in June.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all exams. Student chromebooks will also have a TI graphing calculator app for at home use.

## Algebra I

**Grade:** 9, 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Regents

**Credit:** 1

**Prerequisite:** Math 8

**Offered:** Each Year

This course has a required Regents exam offered in June. The emphasis of this course is on Algebra and the functions in Algebra. These topics include, but are not limited to: relationships between quantities and reasoning with equations, descriptive statistics, linear and exponential relationships, expressions and equations, and quadratic functions. The class requires students to demonstrate their ability to apply facts and definitions as well as properly use formulas to make conclusions in these areas.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Algebra I Lab

**Grade:** Currently enrolled in Algebra I

**Length:** 40 Weeks / Alternate Days

**Prerequisite:** Teacher Recommendation

**Offered:** Each Year

Algebra 1 lab provides students the opportunity to participate in smaller group instruction with their teacher. Working with smaller groups allows the teacher to target specific needs of the students and time to include rich tasks and collaboration between students as they strive to master Algebra 1 skills.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Algebra - Geometry (Alg./Geo.)

**Grade:** 9, 10, 11, 12

**Credit:** 1

**Length:** 40 Weeks

**Prerequisite:** Algebra I

**Final Exam:** Local

**Offered:** Each Year

This course focuses on solving problems that use a variety of algebraic and geometric concepts. Some of the major topics that will be covered include equations, inequalities, exponents, polynomials, linear, quadratic, and absolute functions and their graphs. A significant emphasis will be placed on geometric models including the Pythagorean Theorem, perimeter, area, surface area, volume, points, lines, planes, angles, parallel lines, quadrilaterals, right triangles, and coordinate geometry which will be integrated throughout the course. A primary goal will be to integrate the various branches of mathematics using applications, writing, and technology.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Geometry

**Grade:** 9, 10, 11, 12

**Credit:** 1

**Length:** 40 Weeks

**Prerequisite:** Algebra I & Teacher Recommendation

**Final Exam:** Regents

**Offered:** Each Year

This course will cover congruence, proof, constructions, similarity, trigonometry, extending figures to three dimensions, connections to algebra and geometry through coordinates, and circles. A primary goal will be to integrate the various branches of mathematics using applications with emphasis being placed on depth of understanding.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Geometry Lab

**Grade:** Currently enrolled in Geometry

**Length:** 40 Weeks / Alternate Days

**Prerequisite:** Teacher Recommendation

**Offered:** Each Year

Geometry lab provides students the opportunity to participate in smaller group instruction with their teacher. Working with smaller groups allows the teacher to target specific needs of the students and time to include rich tasks and collaboration between students as they strive to master Geometry skills.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Algebra II

**Grade:** 9, 10, 11, 12

**Credit:** 1

**Length:** 40 Weeks

**Prerequisite:** Geometry  $\geq$  65% on Geometry Regents Exam

**Final Exam:** Regents

**Offered:** Each Year

This course is the third math course in the New York State Math Regents sequence. It follows Geometry and is the prerequisite for PreCalculus. The course will include, but is not limited to, major topics of study such as solving, graphing, and writing equations for linear, quadratic, polynomial, power, logarithmic and exponential functions, probability and statistics, and complex numbers, as well as algebra and geometric series, connections to algebra and real world applications.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Algebra II Lab

**Grade:** Currently enrolled in Algebra II

**Length:** 40 Weeks / Alternate Days

**Prerequisite:** Teacher Recommendation

**Offered:** Each Year

Algebra 2 lab provides students the opportunity to participate in smaller group instruction with their teacher. Working with smaller groups allows the teacher to target specific needs of the students and time to include rich tasks and collaboration between students as they strive to master Algebra 2 skills.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

## Financial Topics I

Grade: 11, 12

Length: 20 Weeks / Semester 1

Final Exam: Final Project

Credit: 0.5

Prerequisite: None

Offered: Each Year

The objective of Financial Topics I is to provide students with a solid foundation for the application of high school mathematics in the real world. The focus of the course will be to prepare students for the reality of managing their personal finances. Topics will include careers, emergency funds, dangers of debt, credit cards, investments, retirement plans, and being an educated consumer.

## Financial Topics II

Grade: 11, 12

Length: 20 Weeks / Semester 2

Final Exam: Final Project

Credit: 0.5

Prerequisite: None

Offered: Each Year

The objective of Financial Topics II is to continue to provide students with a solid foundation of applications of mathematics in the real world. The focus will continue to explore your personal finances with topics that will include mathematical appreciation, design and engineering mathematics, real estate and mortgages, essential insurances, bargain shopping and negotiating.

## College PreCalculus - MAT 116

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 4 College

Prerequisite: Algebra II,  $\geq 70\%$  on Algebra II Regents Exam

Offered: Each Year

Topics introduced in Algebra 1, Geometry, and Algebra 2 - including number theory, conics, and analytical geometry - will be discussed in more depth. There will be a strong emphasis on Advanced Algebra and the **use of a graphing calculator is required.**

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

**Students are eligible to take this course as College PreCalculus, for 4 college credits through NCCC, if they pass the Algebra 2 course and pass the Algebra 2 Regents Exam with a score of  $\geq 70\%$  (or by teacher recommendation if no Regents Exam scores available).**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## College Calculus I & II - MAT 120

Grade: 12

Credit: 0.5 High School per semester /  
4 College per semester

Length: 20 Weeks Each / Semestered

Prerequisite:  $\geq 70\%$  in College PreCalc. &  
 $\geq 65\%$  on the Algebra II Regents Exam

Final Exam: Local

Offered: Each Year

Calculus is a branch of mathematics which provides methods for solving two large classes of problems. One involves finding the rate of which variable quantity is changing (using differential calculus) and the other is finding the necessary relationships that exist when its rate of change is given (integral calculus). Calculus is the language for expressing physical laws in precise mathematical terms and is a tool for studying the consequences.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

**This course is taught at Freshman College level and students earn 4 college credits per semester. To take this course, students must meet the established NCCC criteria.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## College Statistics - MAT 164

Grade: 11, 12

Length: 40 Weeks / Alternate Days

Credit: 0.5 High School / 3 College

Prerequisite: \*See Below

Corequisite: Can enroll with Algebra II if >70% on Geometry Regents Exam

Final Exam: Local

Offered: Each Year

This course is designed to be equivalent to SUNY College Level Statistics. It is an introduction to statistical concepts including descriptive statistics, measures of central tendency, measures of dispersion, basic probability rules, conditional probability, probability distributions, normal distributions, estimation of parameters, hypothesis testing, correlation, and regression. Use of computer applications and simulations are done using Microsoft Excel and a TI-83 Plus graphing calculator. The class procedure may be varied to include lecture, problem solving, group discussions, statistical analysis, and projects.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

**\*Students are eligible to take this course as College Statistics, for 3 college credits through NCCC, if they receive a score  $\geq 75\%$  in the Algebra II course or  $\geq 70\%$  on the Algebra II or Geometry Regents Exam and teacher recommendation.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## College MAT 102

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Topics include solving first degree inequalities, introduction to functions, linear equations in two variables and graphing, solving systems of two or three linear equations and inequalities, brief review of polynomial operations and factoring, algebraic fractions, variation, solving rational equations and proportions, rational exponents and radical expressions, complex numbers, solving radical equations, and four methods for solving quadratic equations, with emphasis on problem solving and applications throughout the course.

This is a full year course available for college credit registration via Genesee Community College's ACE Program. Students may receive three SUNY College credits.

**NOTE:** Graphing calculators will be provided for in-class instruction and for all NYS exams. Student Chromebooks will also have a TI graphing calculator app for at home use.

To take this course as college credit, students must meet the established GCC criteria.

\*Please reference the AP & College Course Attendance Prerequisite.

A significantly discounted Genesee Community College tuition fee is required for students who wish to receive college credit.

## Accounting

Grade: 10, 11, 12

Length: 40 Weeks

Final Exam: Local

This course is designed to develop initial occupational competency in this subject. Upon completion of this study, the student should be able to analyze business transactions, handle bookkeeping activities, utilize source documents, complete business forms, prepare a payroll with employee deductions and employer's taxes, and other accounting functions. Recommended for business majors as well as any student planning to enter a business program in college.

This course may be used as a 3rd math credit in a sequence of three math courses for a Regents Diploma.

\*Please note, this Math course is offered through the Business Department.

Credit: 1

Prerequisite: Pass Alg. I & Geo. courses. Must also pass the Alg. I & Geo. Regents Exams (or with teacher recommendation)

Offered: Each Year

**NOT OFFERED 2024-2025**

Credit: 1

Prerequisite: Pass Alg. I & Geo. courses. Must also pass the Alg. I and Geo. Regents Exams (or with teacher recommendation)

Offered: Every other year

**NOT OFFERED 2024-2025**



## **Electricity and Digital Electronics**

**Grade: 10, 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite / Corequisite: Production & Manufacturing Systems**

**Offered: Each Year**

This course will introduce the basics of electronics and digital electronics. Digital circuits are the basis for computers, robots, and many other electronic devices used today. This hands-on course will allow the students to experience circuit design and testing, as well as project fabrication. Typical units of study include: soldering, resistance, capacitance, electronic instruments, transformers, speakers, solid state devices, binary counting, and logic gates. Typical projects include strobe light, amplified cell phone speaker, 555 Timer Car, and Digital Dice.

**This course may be used as a 3rd math credit in a sequence of three math courses for a Regents Diploma.**

**\*Please note, this Math course is offered through the Technology Department.**

# Music

*Mr. Christopher Hart*

*Miss Claudia Hovey*

## **Course Offerings Include:**

Symphonic Band

Wind Ensemble

Jazz Band

Festival Chorus

Select Chorale

Vocal Jazz

College Music Theory

Music Arranging and Composition

## **Recommended Sequence for Music Majors:**

3 Credits in Music Performance

0.5 Credit in College Music Theory

0.5 Credit in Music Arranging/Composition Plus

1 Credit in Studio in Art

# **BAND**

## **Symphonic Band**

**Grade: 9, 10, 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: 8th Grade Band**

**Offered: Each Year**

Instruction will take place in full ensemble and small ensemble rehearsals and group lessons. Instruction in smaller group situations will be directed toward developing technical, aural, and expression skills by using materials other than those used in full ensemble rehearsals. Large ensemble rehearsals will aid in increasing understanding of music fundamentals and developing large group performance skills.

## **Wind Ensemble**

**Grade: 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: Audition**

**Offered: Each Year**

Instruction consists of full ensemble and small ensemble rehearsals, group, and individual lessons. Emphasis in all situations is upon developing musical independence and advanced executive and cognitive skills necessary for the effective performance of a variety of styles of music. Participation in advanced co-curricular and extra-curricular music activities is encouraged.

## **Jazz Band**

**Grade: 10, 11, 12  
(9th with Middle School Jazz experience)**

**Length: 40 Weeks / Alternate Days**

**Final Exam: Local**

**Credit: 0.5**

**Prerequisite: Audition & must also be enrolled in Symphonic Band or Wind Ensemble**

**Offered: Each Year**

Through the rehearsal of a variety of styles of Jazz music, aural, performance and improvisational skills will be developed. Music selected will be such that an understanding of Jazz history and structure is developed. Independent participation in small groups is encouraged. Students must also be enrolled in Wind Ensemble or Symphonic Band.

# CHORUS

## Festival Chorus

**Grade:** 9, 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite:** None

**Offered:** Each Year

The Festival Chorus, an entry-level ensemble, is open to any student at the High School level interested in singing. Large group rehearsals will reinforce the material given during small group lesson instruction. Lessons (one per week) will concentrate on beginning vocal technique, basic music theory common practices, sight-reading, and aural skills. Students will also experience the preparation and performing of a variety of musical compositions in different genres. The ensemble meets every day.

## Select Chorale

**Grade:** 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite:** Festival Chorus & Teacher Recommendation

**Corequisite:** Festival Chorale

**Offered:** Each Year

The Select Chorale is an intermediate ensemble whose performance repertoire consists of a wider variety of genres. Instruction will concentrate on advanced vocal technique and music theory common practices. This ensemble is also important for students interested in developing performance skills (as a soloist and ensemble member) applicable to the study of vocal music at the college level as well as presentation skills used for many other fields. The ensemble is available to those students who successfully audition for membership. The Select Chorale meets every day. This group performs regularly in the community.

## Vocal Jazz Ensemble

Grade: 10, 11, 12

Length: 40 Weeks / alternate days

Credit: 0.5

Prerequisite: Festival Chorus & Teacher Recommendation

Corequisite: Festival Chorus or Select Chorale

Final Exam: Local

Offered: Each Year

The Vocal Jazz Ensemble is an advanced ensemble whose performance repertoire consists of the jazz, swing, and popular styles of music. Instruction will concentrate on advanced vocal technique and music theory common practices. This ensemble is also important for students interested in developing performance skills (as a soloist and ensemble member) applicable to the study of vocal music at the college level as well as presentation skills used for many other fields. The ensemble is available to those students who successfully audition for membership. The Vocal Jazz Ensemble meets every other day. This group performs regularly in the community. Students must also be enrolled in Festival Chorale or Select Chorale.

## MUSIC

### College Music Theory - MUS 102

Grade: 9, 10, 11, 12

Length: 40 Weeks / Alternate Days

Credit: 0.5 High School / 3 College

Prerequisite: Chorus, Band, or by Teacher Recommendation

Final Exam: Written Exam & Final Project

Offered: Each Year

Throughout the music theory course, students will study the fundamentals of music as well as specific musical procedures, and apply them to reading, writing, describing, and analyzing music. Students will also participate in ear training and sight singing activities. This course will result in a final musical composition encompassing all of the concepts and techniques learned throughout the school year. This course is valuable to any students interested in learning more about how music 'works'. It is essential for those students who are interested in a career in music or music study at the college level.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## **Music Arranging and Composition**

**Grade: 10, 11, 12**

**Length: 40 Weeks / Alternate Days**

**Final Exam: Project**

**Credit: 0.5**

**Prerequisite: Music Theory or Teacher Recommendation**

**Offered: Each Year**

Music arranging and composition is designed to expand the students' first-hand knowledge and understanding of the world of music. Students should already know the fundamentals of music notation and theory. That knowledge will be applied to their own creative ideas to arrange and compose music for various assignments.

Following a review of the Music Notation and Theory curriculum, the teaching method in this course will consist primarily of independent activities for individuals. Students will spend much of their time in this class working independently, completing their own musical arrangements and compositions. Most work in this course will be done during class time, though some students may need to complete work after school to keep current with their assignments. Due to the nature of the assignments, students may often need to do several revisions in order to achieve mastery on their projects. Projects may be revised for a better grade.

Upon successful completion of Music Arranging and Composition, students will be able to compose melodies, harmonize their melodies, and write supporting bass lines. Students will also learn how to arrange music for specific uses. Student work will be performed "live" whenever possible.

## **Music Lessons**

All music students are assigned 1 lesson per week. These are essential to the development of musical knowledge, musicianship, and performance skills. They are required.

# Science

***Mrs. Tammy Kelly, Curriculum Facilitator***

*Mr. Richard Meyers*

*Mrs. Jacqueline Klumpp*

*Miss Madison Manning*

*Mr. Jacob Oddy*

## **Course Offerings Include:**

Living Environment

Earth Science

Environmental Science

Chemistry

AP / College Environmental Science

Physics

College Biology I & II

# SCIENCE

## Living Environment

**Grade: 9**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

This course is designed to provide a broad general understanding of the fundamental principles of biology. The major emphasis is placed upon the study of life, including life processes; maintenance of life in plants; transmission of traits from generation to generation; reproduction and development; evolution and diversity and plant and animals in their environment. An additional laboratory period is required. Thirty laboratory write ups must be satisfactorily completed in order for the student to be eligible to take the Regents exam.

## Earth Science

**Grade: 10**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: Living Environment**

**Offered: Each Year**

This course focuses on the dynamic forces at work on our planet and the universe. Topics include the earth's inner structure, geologic history, weather, plate tectonics, astronomy, climate, rock & minerals, and surface processes. An additional lab period is required. Thirty laboratory write ups must be satisfactorily completed in order for the student to be eligible to take the Regents exam.

## Environmental Science

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: Earth Science**

**Offered: Each Year**

Environmental Science is a third year science course offered to students as an alternative to Regents Chemistry or Physics. The major topics include ecology, pollution, land use, populations, energy and mineral sources, and environmental policy. The course will apply prior knowledge from Earth Science and Living Environment to current environmental issues. Laboratory investigations and experiments will make up a large portion of the course along with other skills such as map reading and scientific research.



## Chemistry

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: Living Environment & Earth Science**

**Offered: Each Year**

This course is a study of the structure of matter, changes in the composition of matter, and the principles which govern such changes. Topics include; the atom, the Periodic Table, the math of chemistry, chemical bonding, solids/liquids/gases, rates of reaction, organic chemistry, oxidation/reduction, acids/bases/salts, and nuclear chemistry. In addition to regular classes, a laboratory period is required. Thirty laboratory write ups must be satisfactorily completed in order for the student to be eligible to take the Regents exam.

## AP / College Environmental Science - BIO 136

**Grade: 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1 High School / 3 College**

**Prerequisite: Earth Science, Living Environment, Chemistry**

**Corequisite: Chemistry (Teacher Recommendation)**

**Offered: Each Year**

The goal of AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet, there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science.

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

## Physics

Grade: 11, 12

Length: 40 Weeks

Final Exam: Regents

Credit: 1

Prerequisite: Living Environment & Earth Science

Offered: Each Year

In this course, you will study motion and energy, forces, electricity, magnetism, light, and modern physics. There is a considerable amount of mathematical content. An additional laboratory period is required. Thirty laboratory write ups must be satisfactorily completed in order for the student to be eligible to take the Regents exam.

## College Biology I & II - BIO 109 & BIO 110

Grade: 11, 12

Length: 20 Weeks Each / Semestered

Final Exam: Local

Credit: 0.5 High School per semester / 4 College per semester

Prerequisite: Regents Chemistry,  $\geq 85$  on Living Environment Exam

Offered: Each Year

This course is designed to challenge students with the rigor of the topics normally covered in a freshman level College General Biology class. **It is much more demanding than the Living Environment Course, which is a requirement for all high school students.** This includes information on various biochemical processes, cell structure, physiology transport, nutrition, plants and genetics. The information is **very in depth** to reflect the NCCC syllabus. Approximately 5 hours per week for studying are necessary to be successful. There will be one scheduled lab period in the four-day cycle. Students successfully completing this course earn 4 NCCC credits per half year, for a total of 8 NCCC credits.

**Students must meet the established criteria to enroll in this course.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.**

# Social Studies

***Mr. William Crago, Curriculum Facilitator***

*Mr. Daniel Dolansky*

*Mr. Chad Gretz*

*Mr. Ryan Keys*

*Mrs. Jill Keys*

## **Course Offerings Include:**

Global History and Geography I

Global History and Geography II

AP World History

American History and Government

AP U.S. History

Government and Economics

AP Government and Economics

AP Psychology

Media and Propaganda

\*College Introduction to Sociology (semester one)

\*Modern Issues (semester two)

\* Semestered courses

## **SOCIAL STUDIES**

### **Global History and Geography I**

**Grade: 9**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

Grade 9 begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. While the course emphasizes the importance of historical and spatial thinking, all of the social studies practices and standards are included in the study of global history and geography.

### **Global History and Geography II**

**Grade: 10**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: Global History & Geography I**

**Offered: Each Year**

Grade 10 provides a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The last three Key Ideas focus on global issues, applying a more thematic approach. While the course emphasizes the importance of historical and spatial thinking, all of the social studies practices and standards are included in the study of global history and geography. At the conclusion of Global History and Geography II, all students are required to pass a comprehensive Regents Exam covering topics and themes focused on during Grade 10.

## AP World History

**Grade: 10**

**Length: 40 Weeks**

**Final Exam: AP Exam, Regents Exam**

**Credit: 1**

**Prerequisite: Global History & Geography I (Honors)**

**Offered: Each Year**

AP World History focuses on developing students' abilities to think conceptually about world history from approximately 1200 CE to 2001 and apply historical thinking skills as they learn about the past. Five themes of equal importance - focusing on the environment, cultures, state-building, economic systems, and social structures - provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. The AP World History course corresponds to two semesters of a typical introductory college history course. Students have the option of taking the AP exam in May. The rigorous test includes sections of multiple choice, short answer responses and a Document Based Essay and a Long Essay question.

Student selection for this course will be based upon performance and success in Global History and Geography I (Honors) and teacher recommendation. It is essential that students possess the skills necessary to be successful at the AP level.

**Sophomore students will be required to pass the Regents Exam.**

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## American History and Government

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: Regents**

**Credit: 1**

**Prerequisite: Global History and Geography I & II**

**Offered: Each Year**

Grade 11 begins with the colonial and constitutional foundations of the United States and explores the government structure and functions written in the Constitution. The development of the nation and the political, social, and economic factors that led to the challenges our nation faced in the Civil War are addressed. Industrialization, urbanization, and the accompanying problems are examined, along with America's emergence as a world power, the two world wars of the 20th century, and the Cold War. Students explore the expansion of the federal government, the threat of terrorism, and the place of the United States in an increasingly globalized and interconnected world. At the conclusion of American History and Government, all students are required to pass a comprehensive Regents exam covering topics and themes focused on during Grade 11.

## AP U.S. History

**Grade: 11**

**Length: 40 Weeks**

**Final Exam: AP Exam, Regents Exam**

**Credit: 1**

**Prerequisite: Global History & Geography I & II**

**Offered: Each Year**

This course is an intensive study of American history. Designed to replicate introductory history courses found on college campuses, a heavy emphasis will be placed on listening, reading, and critical thinking skills. The first semester will investigate this nation's history, beginning with its humble origins at Jamestown and concluding with post Civil-War Reconstruction. The second semester focuses on the trials and triumphs of this nation as it moved to become a dominant world power starting in the late 19th century and continuing through to the present day. Students will be required to produce a number of major research papers, as well as regularly scheduled short, critical thinking type essays. A registration fee will be required to take the AP exam.

**Students will be required to pass the Regents exam**

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## Government and Economics

**Grade: 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: American History & Government**

**Offered: Each Year**

The Government section of this course aims to provide students with opportunities to become engaged in the political process by acquiring the knowledge and practicing the skills necessary for active citizenship. Content specifications are not included, so that the course can adapt to present local, national, and global circumstances, allowing teachers to select flexibly from current events to illuminate key ideas and conceptual understandings. Participation in government and in our communities is fundamental to the success of American democracy.

The Economics section of this course examines the principles of the United States free market economy in a global context. Students will examine their individual responsibility for managing their personal finances. Students will analyze the role of supply and demand in determining the prices individuals and businesses face in the product and factor markets, and the global nature of these markets. Students will study changes to the workforce in the United States, and the role of entrepreneurs in our economy, as well as the effects of globalization. Students will explore the challenges facing the United States free market economy in a global environment and various policy-making opportunities available to the government to address these challenges.

## AP Government and Politics

Grade: 12

Length: 40 Weeks

Final Exam: AP Exam

Credit: 1

Prerequisite: American History & Government

Offered: Each Year

This course is designed to give students an analytical perspective on government and politics in the United States, and is intended as a secondary school equivalent to a one-semester college introductory course. This AP course is designed to also meet the NYS graduation requirements for economics.

Some of the topics to be covered include the Constitutional foundations of U.S. government such as federalism, separation of powers, and checks and balances; political parties, interest groups, and mass media; political beliefs and behaviors; public policy making; institutions of national government such as the Congress and the federal courts; and civil rights and civil liberties.

The AP United States Government and Politics exam is 2 hours and 25 minutes long, consisting of 60 multiple choice questions and a 100 minute free-response section consisting of 4 questions offered in May.

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## AP Psychology

Grade: 11, 12

Length: 40 Weeks

Final Exam: AP Exam

Credit: 1

Prerequisite:  $\geq 80\%$  on Global History Regents Exam (Juniors) U.S. History Regents Exam (Seniors)

Offered: Each Year

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental process of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

**\*A registration fee will be required to take the AP exam.**

**\*Please reference the AP & College Course Attendance Prerequisite.**

## Media and Propaganda

**Grade: 11, 12**

**Length: 40 Weeks**

**Final Exam: Final Project**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

In the first half of the class, students will delve into the fascinating world of mass media and propaganda, exploring their profound impact on society throughout the 19th and 20th centuries. Get ready to uncover the secrets behind influential media outlets and their role in shaping historical events and biases. Students will study the strategies (such as newspapers, radio broadcasts, TV, music, movies, children's book, magazines, etc) employed by the media outlets to sway public opinion and manipulate societal narratives. In the second half of the course, it will be project-based. Students will dive into the world of modern media and its impact on our understanding of current world issues. Using modern technological tools and platforms, students will have the opportunity to create a persuasive media piece that presents different perspectives on a current world issue. Whether it's through video production, podcasting, or interactive multimedia, students will learn to effectively communicate their message while considering the diverse viewpoints that shape public opinion.

**\*This course will also provide an opportunity to earn credit towards the New York State Seal of Civic Readiness.**

## College Introduction to Sociology - SOC 101

**Grade: 11, 12**

**Length: 20 Weeks / Fall Semester**

**Final Exam: Local**

**Credit: 0.5 High School / 3 College**

**Prerequisite: None**

**Offered: Each Year**

This course is an introduction to sociology as a way of understanding the world. Sociology is a field of study that explains social, political, and economic phenomena in terms of social structures, social forces, and group relations.

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara University tuition fee is required for students who wish to receive college credit.**



## **Modern Issues**

**Grade: 11, 12**

**Length: 20 Weeks / Spring Semester**

**Final Exam: Local**

**Credit: 0.5**

**Prerequisite: None**

**Offered: Each Year**

Students will examine contemporary local, national, and global challenges such as racism, sexism, poverty, crime and justice, and environmental changes. Students will view these challenges through historical, economic, political, and sociological lenses to understand the issues and offer solutions. Students will identify an issue to work on and, when possible, test their solutions and the impacts of their proposals. Students wishing to earn the New York State Seal of Civic Readiness by completing a Capstone Project are strongly encouraged to take this course.

# Technology

***Mr. Henri Kursten***

## **Tech-Lab Course Offerings Include:**

Production / Manufacturing Systems  
Land Transportation and Transportation Systems  
Residential Construction/Materials Processing  
Robotics/Principles of Engineering  
Electricity and Digital Electronics

## **Computer Aided Drafting Course Offerings Include:**

CAD/Design and Drawing for Production  
Engineering and Manufacturing Drawing/\*College Advanced  
CAD/Architectural & Structural Drawing

## **Math Credit:**

Technology students who need a third year of math credit may get that credit by completing the Electronics/Digital Electronics class.

## **NCCC Articulation Credits:**

Drafting students who achieve an average of 90% or higher through DDP and Architecture Drawing classes will earn two Niagara County Community College articulation credits for DRF173. Drafting students who achieve an average of 90% or higher through DDP and Engineering Drawing classes will earn two Niagara County Community College articulation credits for MET110. Students who hold a 90% through all three drawing classes here at Newfane will also receive three credits for DRF275.

Robotics class students who maintain a 90% average will earn two articulation credits for TEC 250.

# TECHNOLOGY LAB

## Production and Manufacturing Systems

**Grade: 9, 10, 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: None**

**Offered: Each Year**

This course is a prerequisite to other courses offered in the engineering technology sequence and is a recommended course for freshman majors. It is mostly hands-on and students learn about the two types of production systems: manufacturing, and construction. The students learn to use the equipment and machines for production systems dealing with woodworking, sheet metal, and plastics technology. Projects are built to allow students the opportunity to reinforce what they learn in theory. Learn and experience all three types of manufacturing systems through hands-on projects. This section of the course covers manufacturing from idea phase to finished and packaged products through marketing, design, production planning, production, and distribution. Design and build your own project and take part in a mass production process.

## Land Transportation and Transportation Systems

**Grade: 9, 10, 11, 12**

**Length: 40 Weeks**

**Final Exam: Local**

**Credit: 1**

**Prerequisite: None**

**Offered: Every Other Year  
NOT OFFERED 2024-2025**

Transportation is an integral and important part of our technological society. This activity-based course provides technology students with an introduction to transportation and its importance in our society. Students will participate in activities involving design, fabrication, testing, and analyzing transportation systems on the land, air, and sea. Students will study the systems of propulsion, structure, suspension, guidance, and control as they build their projects. Internal combustion motor parts and operation cycles will be studied. Example projects may include: internal combustion motor teardown & assembly, Scratch-built R/C Cars, CO2 Cars, R/C Airplanes, Boat Hull Forming, R/C Snow Skimmers.

## Residential Construction / Material Processing

**Grade:** 10, 11, 12

**Length:** 20 Weeks Each / Semestered

**Final Exam:** Local

**Credit:** 0.5 / Semester

**Prerequisite / Corequisite:** Production & Manufacturing Systems

**Offered:** Every Other Year  
**NOT OFFERED 2024-2025**

Construction products are unique in that they are built on site. This course covers the construction of homes through hands-on projects done here in the lab/shop. Students will learn about residential construction-staking and surveying a job site, building foundation types, building structures, and building subsystems.

Planned Hands-on Projects may include: staking foundations using a transit, carpentry toolbox, scale basement foundation, scale superstructure, working with PVC, PEX, and copper pipes, electrical wiring, roof shingling, installing vinyl siding, and finishing drywall.

In the second semester we focus on two of the seven resources of Technology: tools & machines and materials. It deals with the processing of many kinds of materials and incorporates the use of machinery for a hands-on course. It is concentrated in metal and wood processing and the material properties of various types of each. Manufacturing processes in separating, combining, forming, and finishing are covered. Various forms of welding, lathe turning, milling, and forging are some of the techniques used to build a steel 3" die, metal puzzles, machine an aluminum gavel, wooden ballpoint pen, or a chess board. Safety standards and practices and career information will be integrated into each unit.

## Robotics / Principles of Engineering

**Grade:** 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite / Corequisite:** Production & MFG Systems, Electronics, or Materials Processing

**Offered:** Each Year

This course will give students hands-on experience in building a variety of robots. Students will work with gearboxes and learn to calculate gear ratios. They will also learn the components of remote controls and how they work. Beginning robot programming will also be taught to control autonomous robots. Students will design, build, and compete with their own robot in class and local competitions. Tethered, remote-controlled, and programmable robots are a few of the robots the students may build in the first semester. Second semester is designed to allow the students to use the knowledge they have gained to be creative and innovative in designing and building challenging culminating projects while using the "Engineering Design Process". Build "Battle Bots", recumbent bicycles, electric powered vehicles, or a hovercraft you can ride on. The sky's the limit here! Use welding, sheet metal forming, machining processes, and woodworking to achieve your vision. Students will design and build projects for in-class and inter-school technology competitions such as Tech Wars.

## Electricity and Digital Electronics

**Grade:** 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite/Corequisite:** Production & Manufacturing Systems

**Offered:** Each Year

This course will introduce the basics of electronics and digital electronics. Digital circuits are the basis for computers, robots, and many other electronic devices used today. This hands-on course will allow the students to experience circuit design and testing, as well as project fabrication. Typical units of study include: soldering, resistance, capacitance, electronic instruments, transformers, speakers, solid state devices, binary counting, and logic gates. Typical projects include strobe light, amplified cell phone speaker, 555 Timer Car, and Digital Dice.

**This course may be used as a third math credit in a sequence of three math courses for a Regents Diploma.**

## CAD: COMPUTER AIDED DRAFTING

### Design and Drawing for Production (CAD DDP)

**Grade:** 9, 10, 11, 12

**Length:** 40 Weeks

**Final Exam:** Local

**Credit:** 1

**Prerequisite:** None

**Offered:** Each Year

This is an introductory level course in the field of industrial graphic communications and is a prerequisite to other courses offered in the drafting sequence. The instructor assumes the students have no prior knowledge of computer aided drafting and design (CADD) software. Students will learn the fundamentals of design and drawing, as they are applied to production using AutoCAD computer aided drawing software. Sketching, basic drafting skills such as geometric construction, applying line types and line weights, manipulating text, and creating multi-view drawings are a few skills learned in the first semester. In the second semester, students learn how to dimension drawings, draw isometric objects, create auxiliary views, draw section views, create detailed views, and create assembly drawings with a bill of materials. Although this is a recommended course for freshmen, it can also be taken by non-majors as an elective.

## Engineering and Manufacturing Drawing

### College CAD: Advanced Computer Aided Design and Drafting - DRF 275

Grade: 10, 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 3 College

Prerequisite: CAD DDP  
(Waived for Juniors & Seniors)

Offered: Every Other Year  
**NOT OFFERED 2024-2025**

This is an intermediate level course in the field of industrial graphic communications. Students learn to create 3D computer models and create drawings from these models. SolidWorks parametric solid modeling software is extensively used. The students will be challenged to design their own parts and creations, and produce drawing sets from them. Students will test their creations through engineering programs within SolidWorks for strength and wind flow. 3D prototype models of students' designs are printed to help test their creations. Projects include reverse engineering drawing, product redesign, and student product design. Advanced drawings will be made from their computer models.

*\*Please reference the AP & College Course Attendance Prerequisite.*

A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit.

## Architectural and Structural Drawing

Grade: 10, 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1

Prerequisite: CAD DDP  
(Waived for Juniors & Seniors)

Offered: Every Other Year

This is an intermediate level course in the field of industrial graphic communications. Students will learn to use the Chief Architect software to create their architectural designs. Students will create house plans which include, but are not limited to: floor plans, furniture plans, foundation plans, house elevations, sections, plot plans, etc. Students will also build scale models of the structures they design.

## College Articulations of Tech Prep Students

In addition to students receiving college credit by registering for the College Advanced Computer Aided Design and Drafting class at Newfane HS, the Engineering Technology Faculty of Niagara County Community College, Mechanical and Drafting Programs have agreed to provide advanced placement of Tech Prep students into the listed classes:

2	MET 110	Engineering Drawing DDP
1	TEC 110	Technical Calculations Computer Literacy
2	DRF 173	Introduction to CAD
2	TEC 250	Robotics
2	DRF 275	Advanced Computer Aided Design and Drafting

Conditions of advanced placement are: Satisfactory completion of equivalent high school courses with a grade of 90 or higher, and recommendation of high school instructor.

Those students desiring to receive college credit for listed courses will be required to demonstrate competency of the subject through performance and/or written examination. Competency testing materials will be designed, administered, and evaluated by the discipline coordinator and an appropriate faculty member.

# World Language

*Mrs. Andrea Merchant*

*Mrs. Jessica Najuch*

## **Course Offerings Include:**

Spanish 9

Spanish II

Spanish III

College Spanish I

College Spanish II



# SPANISH

## Spanish 9

Grade: 9, 10, 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1

Prerequisite: None

Offered: Each Year (when needed)

Students will learn basic language proficiency and gain a solid understanding of Hispanic culture as outlined by the New York State Board of Regents. All students who do not pass the World Language Proficiency exam in eighth grade (and Spanish 8 course and do not attend summer school- if offered), must take and pass Spanish 9.

## Spanish II

Grade: 9, 10, 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1

Prerequisite: None

Offered: Each Year

Students will build on vocabulary and grammar skills from level I with many opportunities to read, write, listen and speak. Communication skills and cultural awareness are further developed.

## Spanish III

Grade: 9, 10, 11, 12

Length: 40 Weeks

Final Exam: Regents

Credit: 1

Prerequisite: None

Offered: Each Year

Students will deepen vocabulary, advance grammar skills and strengthen their ability to read, write, listen and speak in Spanish. Continued emphasis will be placed on cultural awareness and communication.

## College Spanish I - SPA 203

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 3 College

Prerequisite: Spanish I, II, III

Offered: Each Year

This course focuses on the development of Hispanic cultural knowledge, audio lingual skills, and the review of Spanish grammar. The course serves also as a reinforcement of reading, writing, listening, and speaking skills. Students will preview the requirements for earning the New York State of Biliteracy which will be offered in College Spanish II.

**Meets SUNY General Education requirement for Foreign Language (FL).**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit**

## College Spanish II - SPA 204

Grade: 11, 12

Length: 40 Weeks

Final Exam: Local

Credit: 1 High School / 3 College

Prerequisite: College Spanish I

Offered: Each Year

Spanish V/College Spanish II is sequential to Spanish IV/College Spanish I and serves as continued development of Hispanic cultural knowledge, audio lingual skills, and review of Spanish grammar. The course will also provide students with an opportunity to improve their reading, writing, listening, and speaking skills. Students will be encouraged to earn the New York State Seal of Biliteracy.

**Meets SUNY General Education requirement for Foreign Language (FL).**

**\*Please reference the AP & College Course Attendance Prerequisite.**

**A significantly discounted Niagara County Community College tuition fee is required for students who wish to receive college credit**

# Vocational BOCES Programs

## Career & Technical Education

Eligible junior students may enroll in a vocational program at BOCES. Newfane students are assigned to the Orleans Technical Center (Medina) unless the selected program is only available at the Niagara Technical Center (Sanborn). The programs are worth three high school credits each year and are two years in length (grades 11 & 12), unless specified otherwise. The link above will take you to the ONBOCES website (or go to: <https://www.onboces.org/>) to view the CTE programs currently offered.

Advanced Manufacturing and Engineering I & II

Animal Science I & II

\*Animation, Film and Visual Effects I & II - Animation (yr. 1) Film & Visual Effects (yr. 2) : **Interview required**

Auto Body Repair I & II

Automotive Technology I & II

\*Building Maintenance and Management I & II

Building Trades I & II

Certified Personal Trainer I & II

Computer Technology I & II

\*Conservation I & II

Cosmetology I & II

Culinary Arts I & II

Diesel Technology / Heavy Equipment / Agriculture Mechanics I & II

Early Childhood Education I & II

Electronics / Electricity I & II

\*Emergency Medical Services I & II - First Responder (yr. 1) EMT (yr. 2)

\*Fashion Design / Interior Decorating I & II

Graphic Communications I & II

Health Occupations Technician I & II

\*Heating, Ventilation, Air Conditioning (HVAC) I & II

Security and Law Enforcement I & II

\*Web Development and Game Programming I & II

Welding I & II

\*Programs only offered at the Niagara BOCES Center.